METHOD OF IMPROVING THE QUALITY OF DEFECTIVE SEMICONDUCTOR MATERIAL

ABSTRACT OF THE DISCLOSURE

A method in which a defective semiconductor crystal material is subjected to an amorphization step followed by a thermal treatment step is provided. The amorphization step amorphizes, partially or completely, a region, including the surface region, of a defective semiconductor crystal material. A thermal treatment step is next performed so as to recrystallize the amorphized region of the defective semiconductor crystal material. The recrystallization is achieved in the present invention by solid-phase crystal regrowth from the non-amorphized region of the defective semiconductor crystal material.